SECTION 1 CONTENTS

1. THE GUIDE: WHAT IT IS; WHAT IT DOES

1.1 Why an Environmental Compliance Guide for Food Processors

As food processors, you are regulated by a variety of federal laws administered by the U.S. Environmental Protection Agency (EPA) that impact human activities and the environment. Noncompliance with these regulations can damage human health and the environment, and result in significant financial liabilities for clean up costs or fines. Environmental compliance may be difficult for some food processors that do not have the time, staff, or other resources necessary to determine their responsibilities. Also, environmental regulations and laws can be complicated, and information on environmental compliance may be difficult to locate. Adding to these complexities, you must be aware of and meet stringent food safety requirements. To assist you, EPA, with special assistance from the American Frozen Food Institute (AFFI), the American Meat Institute (AMI), the National Food Processors Association (NFPA) and the Food Industry Environmental Council (FIEC), has developed this guide to address these issues.

1.2 How to Use This Guide

This guide is intended to provide you, the owner/operator, with a good **first step** in understanding EPA's environmental requirements affecting your specific operations. The guide explains the basis of EPA's major statutes and provides a general overview of a food processor's major EPA requirements. The requirements discussed here should provide a good framework for understanding your federal environmental compliance responsibilities, **but this guide does not provide the final word on what your compliance responsibilities are and how you meet them.** You should consult directly EPA's regulations, program guidance, and other compliance assistance materials.

State/Local Requirements: *The regulations discussed in this guide are primarily EPA requirements. Your state may have its own, stricter requirements; however, state regulations usually are based on federal law. Be sure to check your state and/or local government environmental requirements.*[1]

[1] ***The Source Book of State Laws & Regulations for Food Processors****, published by the NFPA in June 1996, offers help in understanding the regulatory requirements in each of the 50 states.*

Organization

The guide begins with a brief overview of the industry and an introduction to several important EPA policies and systems that are designed to foster environmental compliance. Following this introduction, a brief summary of the major environmental statutes applicable to the food processing industry is presented in Section 2.0 *Guide to EPA's Major Environmental Statutes*. Next, to assist you in identifying EPA's statutes and regulations applicable at your facility, Section 3.0 *Understanding the Process: Inputs, Outputs, and Applicable Federal Environmental*

Regulations presents a method of identifying (1) your facility's wastestreams (regulated outputs) and (2) hazardous or other regulated materials that may be inputs to either your process or to ancillary operations (e.g., refrigeration).

Section 3.0 also helps you identify which EPA statute(s) may apply to your inputs and wastes. With this information, you can then refer to the following sections of the guide to learn more about applicable EPA regulations and requirements:

- Section 4.0 How Do I Comply With Wastewater Discharge and Related Regulations?
- Section 5.0 How Do I Comply With Safe Drinking Water Regulations?
- Section 6.0 How Do I Comply With Air Regulations?
- Section 7.0 How Do I Comply With the Emergency Planning and Community Right-to-Know Act Regulations?
- Section 8.0 How Do I Comply With the Hazardous Waste Regulations?
- Section 9.0 How Do I Comply with Spill or Chemical Release Requirements?
- Section 10.0 Other Major Environmental Statutes and Regulations: CERCLA, RCRA Subtitle D, FIFRA, and TSCA.

Remember that this guide highlights major EPA requirements only. To help you in understanding the full range of EPA requirements, Appendix A. *Summary of Major Regulations From the CFR* provides relevant portions of the Code of Federal Regulations (CFR) in an easier-to-understand format (with CFR citations). If you have additional questions, Appendix B. *Resources* provides state and federal agency contacts, hotlines, and an annotated list of important EPA policies and guidance. References associated with this guide are presented in Appendix C. *References*.

Your state may have its own, stricter requirements than the federal requirements. Be sure to contact your state regulatory agency for information on state requirements.

Attention to Food Safety

As you are well aware, food safety is a paramount objective of food processors and agencies which regulate the industry. Food safety should be kept in mind when reviewing the information in this guide and complying with environmental regulations. Under the Federal Food, Drug and Cosmetic Act (FFDCA), the Food and Drug Administration (FDA) of the U.S. Department of Health and Human Services (USDHHS), and the Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) regulate the food processing industry to assure the safety of the food supply. These regulations address sanitation, microbial pathogens, and other sources of foodborne illness. EPA also is involved in food safety by virtue of its responsibility under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to set pesticide tolerances or maximum pesticide residue levels. Some recent activity related to food safety which may directly affect food processors includes the following:

- In 1996, Congress amended both FFDCA and FIFRA under the Food Quality Protection Act (FQPA) to restructure the standard setting, review, and enforcement authorities for pesticide tolerance and residues in food. See Section 10.3 *Federal Insecticide, Fungicide, and Rodenticide Act* for more information.

- On May 12, 1997, Vice President Al Gore announced a five-point Administration plan to strengthen and improve food safety, known as the *National Food Safety Initiative*

Program. The plan sets forth new steps to reduce foodborne illness from microbial contaminants by working with consumers, producers, industry, states, universities, and the public.

Ideas for Pollution Prevention

Many industry sectors are experimenting with new approaches to environmental compliance through pollution prevention (P2) techniques, such as reducing the use of hazardous chemicals by switching to alternative less hazardous substances, recycling materials, and reducing wastewater discharge by means of water conservation. The final section of this guide, Section 11.0 *Pollution Prevention Techniques*, contains general information about means of reducing or eliminating your wastestreams. Cost effective compliance and pollution prevention techniques are discussed further in Section 1.5.

1.3 Tools That Encourage Environmental Compliance

1.3.1 Compliance Incentives and Policies

Since 1986, EPA has promoted the use of environmental auditing by companies in the United States. In 1995, EPA updated and expanded its earlier policy in the form of two new policies that encourage companies to achieve environmental compliance by providing incentives for them to conduct environmental audits voluntarily (see *Incentives for Self-Policing Policy*) and to participate in onsite compliance assistance programs *(*see *Small Business Policy)*. These policies focus on proactive identification and prompt correction of violations, and provide penalty mitigation for those who qualify.

> ***Environmental Audit****: For purposes of these policies, an environmental audit is defined as "a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements."*

- ***Incentives for Self-Policing Policy***. In 1995, EPA issued *Incentives for Self-Policing: Discovery, Disclosure, Correction, and Prevention of Violations* (commonly known as the *Audit Policy*). Under this policy, companies that (1) voluntarily discover, promptly disclose, and correct violations; (2) prevent their recurrence; and (3) promptly remedy any resulting damage do **not** face gravity-based penalties (i.e., the penalty amount over and above the company's economic gain from noncompliance). EPA retains its discretion to recover **economic benefit** gained as a result of noncompliance, so that companies will not be able to obtain an economic advantage over their competitors by delaying their investment in compliance. EPA continues its practice of not routinely requesting environmental audit reports. For additional information on this policy and how it may apply to you, you can review the following: the final policy in the *Federal Register* (60 FR 66706-66711 [December 22, 1995]); the *Audit Policy Interpretive Guidance*; and the *Audit Policy Update*, EPA's newsletter about the implementation of the policy. All

three are available at the website of EPA's Office of Enforcement and Compliance Assurance (OECA) at **http://es.epa.gov/oeca/auditpol.html/**.

- ***Small Business Policy***. EPA's *Policy on Compliance Incentives for Small Businesses* (*Small Business Policy*), issued on May 20, 1996, was developed to help small businesses achieve environmental compliance. If you are a small business with 100 or fewer employees in the company, you may be eligible to have all potential penalties for noncompliance waived, if you agree to come into compliance and meet other criteria.

  Definition: *Any business owned by a person, corporation, or partnership that employs 100 or fewer individuals across all facilities and operations owned by the entity is considered a small business.*

  The policy provides incentives such as **penalty waivers** or **penalty reduction** for businesses that participate in government-sponsored, onsite compliance assistance programs, or that conduct environmental audits to discover, disclose, and correct violations. Onsite compliance assistance includes information or assistance provided by EPA, a state agency, or other government agency or government-supported entity during a visit to your facility to help you comply with mandated environmental requirements. This assistance may be obtained confidentially from those state assistance programs that offer such confidentiality.

  The sooner **noncompliance** is disclosed and corrected, the greater the benefits. A penalty can be waived entirely or reduced significantly if violations are self-disclosed to the proper authorities and corrected. If compliance is delayed, however, and EPA discovers the violation on its own, the ensuing penalties may be very costly. You can review the final policy [*Federal Register* 61 FR 27984; June 3, 1996], and more information on how it may apply to your business by accessing **http://es.inel.gov/oeca/smbusi.html/**.

  To assist you with compliance, EPA and states have developed numerous guides written in "plain English" on how to conduct audits and understand regulations. Contact the Small Business Ombudsman in your EPA regional office or visit EPA's Internet site for more information at **http://www.epa.gov/ttnsbap1/**--*Small Business Assistance Programs*. You also may call the EPA's National Small Business Ombudsman's toll-free hotline at 1-800-368-5888.

Many states have adopted incentives for environmental auditing -- some through policies and others by legislation. Some states have adopted laws that provide broad privileges and immunities for environmental audit findings. EPA opposes these laws and is working with state officials to resolve issues with regard to the state maintaining necessary enforcement and information gathering authorities, and ensuring legally mandated public access to information.

To the extent that violations, revealed through an audit and disclosed under a state audit privilege and immunity law, continue to be addressed inadequately, EPA may take action through its oversight authorities granted under the federal environmental laws. However, EPA has not brought, and will not bring enforcement actions against companies merely because they take advantage of state audit privilege and immunity laws.

1.3.2 Environmental Management Systems

An **environmental management system (EMS)** uses a defined process to identify the environmental impacts of your operations, set goals, implement procedures to minimize those impacts, and measure results to determine whether established goals and procedures are appropriate. Such a system has the potential to improve your company's environmental performance and compliance with regulatory requirements. It also may save your company money, reduce liability, and improve efficiency in operations. An example in the food processing industry is the environmental operating plan that Jack M Berry, Inc. (LaBelle, FL), a mid-sized juice-processing facility, is developing under EPA's Project XL (X for environmental eXcellence and L for Leadership). See Section 11.4.1 *EPA Programs* for a brief explanation of this effort.

At this time, EPA is not basing any regulatory incentives solely on the use of EMSs, or certification to ISO 14001. For more information on EPA's position, see the Federal Register Notice, EPA Position Statement on Environmental Management Systems and ISO 14001 and a Request for Comments on the Nature of the Data to be Collected from Environmental Management System/ISO 14001 Pilots, 63 FR 12094-97, March 12, 1998, from the EPA's Office of Reinvention. This notice can be accessed at EPA's website at ***http://www.epa.gov/reinvent/notebook/emsfr1.htm/****.*

EPA supports the development and use of EMSs that help a business achieve its environmental obligations and broader environmental performance goals. EPA encourages the use of EMSs that focus on improved environmental performance and compliance, as well as source reduction (pollution prevention) and system performance. By working in partnership with a number of states, EPA is exploring the utility of EMSs, especially those based substantially on ISO 14001. ISO 14001, an international standard finalized in 1996 by the International Organization for Standardization (ISO), is based on previous standards and agreement by international business and government representatives.

An EMS includes five key elements which are defined as follows:

(1) The **environmental policy** sets the general direction for your company's EMS, and if appropriately communicated, shows management's commitment that facilitates implementation of the EMS throughout all levels of your organization.

(2) **Planning** means examining the environmental aspects of your operations more closely. Based on this review, you can develop objectives and targets designed to minimize environmental impacts and improve the overall performance of your company. When you complete the planning process, your organization will have defined the objectives of its environmental program, and developed a plan to meet them.

When planning for an EMS, you might examine water usage. Based on this review, you may decide to reduce water usage by installing low flow nozzles.

Through the remaining components, (3) **implementation and operation**, (4) **checking and corrective action**, and (5) **management review**, your company develops mechanisms to achieve these objectives, reduce catastrophic risk, and continually monitor its environmental activities. These mechanisms are specific to your company's operations, and are reviewed and revised to promote continuous improvement.

EPA recognizes the potential value of a mature EMS. Through initiatives such as Project XL, EPA is working with companies to test EMSs that are designed to achieve superior environmental performance. In 1994, through its Environmental Leadership Program (ELP), EPA issued guidance on EMSs, entitled *Draft Program Guide: Appendix A - ELP Environmental Management System Guidelines.* Although developed for use by facilities applying to ELP, the criteria in the document may be useful to your company. You can access this document through the ELP Homepage at **http://es.epa.gov/elp/append-a.html/**. See Section 11.4.1 *EPA Programs* in this guide for a brief explanation of both Project XL and ELP.

1.4 Brief Overview of the Food Processing Industry

The food processing products industry is a manufacturing industry that processes raw or prepared animal, marine, and vegetable materials into intermediate foods or edible products. This industry includes establishments manufacturing or processing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls. Processes of this industry result in the conversion of bulky, perishable, or inedible food materials into more palatable, or more convenient foods and beverages.[1]

Table 1-1 lists the Standard Industrial Classification (SIC) and the North American Industrial Classification System (NAICS) codes for the types of establishments (i.e., facilities) as defined by the U.S. Census Bureau within SIC Code 20.

As of the Fall 1998, EPA has not published an overall plan for phasing in NAICS codes. But several EPA programs that rely on SIC codes in determining whether a regulatory requirement applies to a given facility have begun to adopt the NAICS codes. The EPCRA Non-313 Program and the Oil Pollution Prevention Program proposed such changes in regulatory criteria in the Federal Register in 1998. Also, the EPCRA 313 Toxic Release Inventory Program has begun planning how to incorporate NAICS codes into its regulatory criteria. This may be a several year effort. For additional information about these respective changes, contact EPA's Chemical Emergency Preparedness and Prevention Office (CEPPO); the Oil Program Center (OPC); or the Office of Prevention, Pesticides and Toxics (OPPT). Information about the EPCRA requirements and Internet sites can be found in Section 7.0 *How Do I Comply With the Emergency Planning and Community Right-to-Know Act Regulations?*; information about the Oil Pollution Prevention Program requirements and Internet site can be found in Section 4.6 *Oil Pollution Prevention Regulation* of this guide.

[1] U.S. Environmental Protection Agency. *Industry Profiles: Food and Kindred Products and Stone, Clay, Glass, and Concrete.* Office of Solid Waste. Prepared by ICF, Inc., July 1994.

Table 1-1. SIC and NAICS Codes for the Food Processing Industry*

SIC		NAICS Codes	
SIC Codes	**Types of Facilities**		
201	Meat products	311611 311612 311615, 311999	Meat packaging plants Sausages and other prepared meat products Poultry slaughtering and processing
202	Dairy products	311512 311513 311514 31152 311511	Creamery butter Natural, processed, and imitation cheese Dry, condensed, and evaporated dairy products Ice cream and frozen desserts Fluid milk
203	Canned, frozen, and preserved fruits, vegetables, and food specialties	311422, 311999 311421 311423 311421, 311941 311411 311412	Canned specialties Canned fruits, vegetables, preserves, jams, and jellies Dried and dehydrated fruits, vegetables, and soup mixes Pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings Frozen fruits, fruit juices, and vegetables Frozen specialties not elsewhere classified
204	Grain mill products	311211 31192, 31193 311212 311822 311221 311111 311611, 311119	Flour and other grain mill products Cereal breakfast foods Rice milling Prepared flour mixes and doughs Wet corn milling Dog and cat food Prepared feeds and feed ingredients for animals and fowls, except dogs and cats
205	Bakery products	311812 311821, 311919, 311812 311813	Bread and other bakery products, except cookies and crackers Cookies and crackers Frozen bakery products, except bread
206	Sugar and confectionary products	311311 311312 311313 31133, 31134 31132 31134 311911	Cane sugar, except refining Cane sugar refining Beet sugar Candy and other confectionary products Chocolate and cocoa products Chewing gum Salted and roasted nuts and seeds

Table 1-1. SIC and NAICS Codes for the Food Processing Industry*

SIC		NAICS	
SIC Codes	**Types of Facilities**	**NAICS Codes**	**Types of Facilities**
207	Fats and oils	311223, 311225 311222, 311225 311223. 311225 311613, 311711, 311712, 311225 311225, 311222, 311223	Cottonseed oil mills Soybean oil mills Vegetable oil mills, except corn, cottonseed, and soybeans Animal and marine fats and oils Shortening, table oils, margarine, and other edible fats and oils, not elsewhere classified
208	Beverages	31212 311213 31213 31214 312111, 312112 31193, 311942, 311999	Malt beverages Malt Wines, brandy, and brandy spirits Distilled and blended liquors Bottled and canned soft drinks and carbonated waters Flavoring extracts and flavoring syrups, not elsewhere classified
209	Miscellaneous food preparations and kindred products	311711 311712 31192, 311942 311919 312113 311823 311423, 111998, 31134, 311991, 31183, 31192, 311941, 311942, 311999	Canned and cured fish and seafoods Prepared fresh or frozen fish and seafoods Roasted coffee Potato chips, corn chips, and similar snacks Manufactured ice Macaroni, spaghetti, vermicelli, and noodles Food preparations, not elsewhere classified

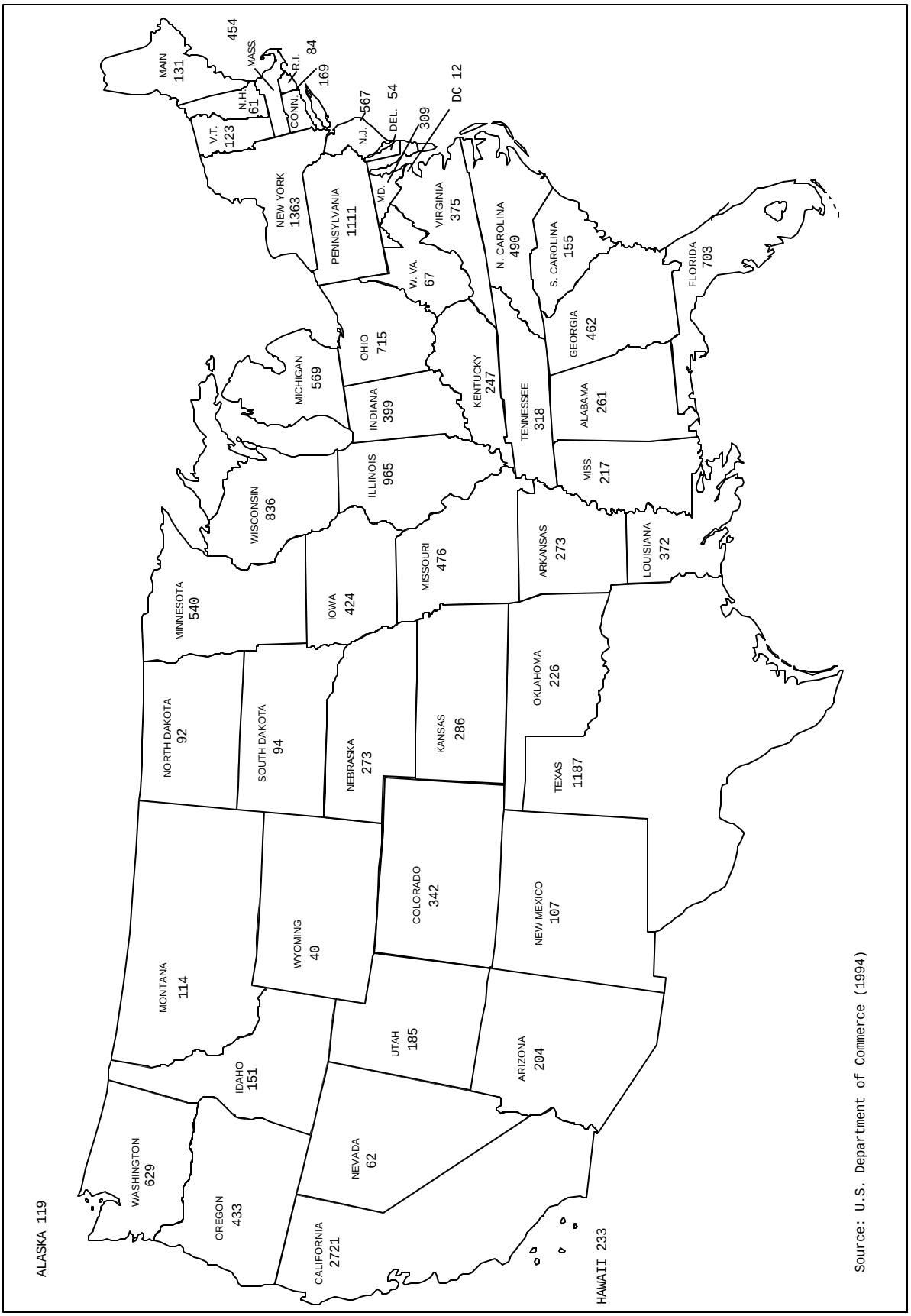
* Table 1-1 lists the 1987 SIC codes and 1997 NAICS codes for the food processing industry. The 1997 NAICS codes will replace the 1987 SIC codes in publications of the U.S. Statistical Agencies over several years (1998-2004), beginning with publications of the NAICS United States Manual. The NAICS Implementation Schedule for these agencies is available on the U.S. Census Bureau's Internet site at **http://www.census.gov/epcd/naics/ timeschd.html/.**

Encompassing all facilities in SIC group 20, titled Food and Kindred Products, this is one of the largest industry groups comprising the manufacturing sector of the U.S. economy.[2] Figure 1-1, shows the distribution of food processing facilities across the U.S. in 1994. The four states with the largest number of establishments were:

- California: 2,721 establishments (13.1%)
- New York: 1,363 establishments (6.5%)
- Texas: 1,187 establishments (5.7%)
- Pennsylvania: 1,111 establishments (5.3%).

[2] The term "food processing" is used throughout the guide in place of Food and Kindred Products.

Figure 1-1. Food and Kindred Products (SIC 20): Distribution of Establishments in the U.S.



Together, these states contain approximately 30 percent of the establishments nationwide. According to the 1994 Census of Manufacturers, there were 20,800 establishments in SIC 20 with shipments valued at $430 billion. In terms of employment, the food processing industry ranks fourth in the Nation in 1994, providing 1.5 million jobs. According to the data in EPA's Toxic Release Inventory (TRI) system, the chemicals released from the food processing industry that may have environmental impact include ammonia, phosphoric acid, sulfuric acid, chlorine, hydrochloric acid, nitric acid, copper compounds, and zinc compounds.

1.5 Cost Effective Compliance and Pollution Prevention Techniques

Understanding federal, state, and local environmental requirements is the first step to cost effective compliance. Finding the most effective means of environmental compliance and going beyond compliance are the next steps. This involves knowing what your compliance activities are and how much you are spending on them (in relative terms at least). This involves establishing a baseline of how much your facility is spending to comply with environmental regulations. With this type of information, you can begin to assess where you might save money through more effective means of complying or through pollution prevention.

Compliance activities for your facility involve interactions between you and the regulatory agencies. These activities include regulatory obligations such as obtaining permits, paying fees, monitoring, and reporting. Planning activities, such as emergency response, and recordkeeping also may be required which may have additional costs. And, of course, pollution control may involve both capital and operating expenses. Depending on the wastestreams your facility generates and how you manage those wastes, you may be subject to this array of requirements. Pollution prevention techniques may help you cut costs, and, in some instances, may enable your operation to drop below regulatory thresholds and thereby become free of certain regulatory requirements.

What is Pollution Prevention?

Pollution prevention (P2) encompasses both source reduction and in-process recycling. The federal Pollution Prevention Act of 1990 defines source reduction as any practice that reduces the amount of any hazardous substance, pollutant, or contaminant entering any wastestream (including fugitive emissions) prior to recycling, treatment, or disposal, and that reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The Act declares that governments, businesses and industries, and individuals should prevent or reduce pollution at its source wherever feasible. Where source reduction cannot be achieved, the Act advocates that responsible parties reuse and recycle to reduce the quantity of hazardous waste requiring treatment.

EPA has adopted a hierarchical approach to environmental protection, including source reduction and in-process recycling, as follows:

A. ***Source Reduction.*** The most desirable option of the hierarchy and the most effective way to reduce risk is through source reduction. Source reduction is defined as any

method that reduces or eliminates the source of pollution entirely. This includes any practice that:

- Reduces the amount of hazardous substances, pollutants, or contaminants that enter a wastestream or are released otherwise into the environment prior to recycling, treatment, or disposal.

- Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

B. ***Recycling.*** Where pollution cannot be prevented through source reduction methods, the wastes contributing to the pollution should be recycled, preferably through closed loop, in-process or in-line methods. Other recycling approaches include the use, reuse, or reclamation of waste after it has been generated.

C. ***Treatment.*** Wastes that cannot be feasibly reduced at the source or recycled should be minimized through treatment in accordance with environmental standards that are designed to reduce both the hazard and volume of wastestreams.

D. ***Disposal.*** Finally, any residues remaining from facility operations that cannot be reduced, reused, recycled or treated should be disposed of safely to minimize their potential for release into the environment. Disposal involves the transfer of a pollutant to the environment in either air, solid waste, or water.

Section 11.0 *Pollution Prevention Techniques* provides general information and references on P2 techniques you might implement at your facility. Some are easy, some are more challenging, and they all involve changes in how you do business. EPA encourages pollution prevention as a solution.

Keep in mind that there may be state pollution prevention requirements with which you must comply. Contact your state regulatory agency for more information. Also, carry out all pollution prevention activities at your facility in accordance with food safety requirements of the USDA and FDA.

SECTION 2 CONTENTS

2. GUIDE TO EPA'S MAJOR ENVIRONMENTAL STATUTES

2.1 Introduction

This section discusses the federal statutes administered by U.S. Environmental Protection Agency (EPA) along with the citations to EPA regulations that may apply to the food processing sector. For a brief discussion of pending and proposed EPA regulations that may apply to the food processors, consult Appendix A.7 *Pending and Proposed Regulations* of this guide.

The descriptions within Section 2.0 are intended solely for general information. Depending upon the nature or scope of the activities at a particular facility, these summaries may or may not necessarily describe all applicable environmental requirements. Moreover, they do not constitute formal interpretations or clarifications of the statutes and regulations. You must keep in mind that this section discusses federal environmental laws administered by EPA (with a few exceptions) and their related regulations only. State and/or local regulations may be more stringent than federal regulations. Therefore, it is essential to consult appropriate state and/or local agencies to learn the full range of environmental requirements that may aply to your facility.

For further information about federal requirements, you should consult the Code of Federal Regulation (CFR) citation(s) listed at the end of each section, and review Appendix A. *Summary of Major Regulations From the CFR* that contains summaries of the portions of the CFR pertaining to each major statute discussed in the guide. Appendix B. *Resources* lists regional and state regulatory agency contacts and EPA hotlines. Appendix C. *References* lists documents used in developing this guide and additional references for your use.

2.2 Clean Water Act (CWA) and Oil Pollution Act (OPA)

The discharge of wastewater from your food processing facility generally will be covered by either the federal Clean Water Act (CWA) or the Safe Drinking Water Act (SDWA) (see Section 5.5 *Underground Injection Control*). In 1972, Congress passed the Federal Water Pollution Control Act (FWPCA), now known as the CWA, which established the basic framework for protecting the waters of the United States. The CWA and its regulations now focus on keeping conventional, nonconventional (including oil and grease), and toxic water pollutants out of our rivers, lakes, and oceans.

Wastewater discharge requirements are discussed in more detail in Section 4.0 and Appendix A.1. For information on planning and release reporting requirements for spills to water, see Section 9.0.

Generally, federal regulations target three types of industrial discharges. Industrial wastewater discharges from food processing facilities probably fall into one of these categories:

(1) **Direct discharges** which include any wastewater from an industrial facility (e.g., untreated, unpolluted wastewater or treated process wastewater) that is discharged straight to surface waters (e.g., ponds, lakes, oceans, streams, and wetlands). Storm water discharges also are considered a type of direct discharge.

(2) **Indirect discharges** which include any wastewater from an industrial facility that is discharged to a publicly owned treatment works (POTW), which subsequently discharges to a surface water.

(3) **Land application** of industrial wastewater discharges. Land application discharges include any wastewater from an industrial facility that is discharged to land to either condition the soil or to fertilize crops or other vegetation grown in the soil.

For more information, see:

- Section 4.0 *How Do I Comply With Wastewater Discharge and Related Regulations?*
- 40 CFR 110-122, 40 CFR 400-500: Clean Water Act and Effluent Guidelines
- Appendix A.1. *Summary of Principal Regulations Under the Clean Water Act.*

NPDES Permit Requirements. The National Pollutant Discharge Elimination System (NPDES) program (CWA Section 402) controls direct discharges into navigable waters. A NPDES permit sets limits, often referred to as **effluent limits** on the amounts of pollutants that can be discharged to surface waters. Permits must be obtained from EPA or the authorized state or territory. As of March 1998, EPA has authorized 42 states and one territory to administer the NPDES program. EPA has not delegated authority to the following states and territories: Alaska, Arizona, District of Columbia, Idaho, Maine, Massachusetts, New Hampshire, New Mexico, Pacific Territories, Puerto Rico, Texas, and the federal Tribal Lands.

NPDES requirements are discussed in more detail in Section 4.3 and Appendix A.1.

For more information, see:

- Section 4.3 *Am I A Direct Discharger?*
- 40 CFR 122: National Pollutant Discharge Elimination System Permit Requirements
- Appendix A.1. *Summary of Principal Regulations Under the Clean Water Act.*

Storm Water Discharges. In 1987, the CWA was amended to require EPA to establish a program to address **storm water discharges** as point sources. Under Phase I of the storm water program, which currently is being implemented, storm water discharges associated with industrial activity, such as food processing, must be covered by a NPDES storm water permit regardless of whether they discharge to a municipal separate storm sewer system or directly to waters of the United States. These permits provide a mechanism for monitoring the discharge of pollutants from these sources to waters of the United States and for establishing appropriate controls. The term "storm water discharge associated with industrial activity" means a storm water discharge from one of 11 categories of industrial activity defined

Storm water requirements are discussed in more detail in Section 4.3.2 and Appendix A.1.

in 40 CFR 122.26. See Section 4.3.2 *Storm Water Dischargers* for more information on these categories and how they apply to your facility.

Food processors that have **no exposure of materials and activities to storm water** are exempt from these requirements. **No exposure** means that there is **no possibility** of storm water, snow fall, snow melt, or storm water "run on" coming in contact with any process or storage related activity. Additionally, storm water permits are not required where runoff flows through a combined sewer to a POTW.

Facilities can comply with NPDES permit requirements for storm water discharges by submitting (1) a Notice of Intent (NOI) to be covered under a **general** permit (Baseline or Multi-Sector); or (2) an application for an **individual** permit; and (3) complying with all of the conditions specified in the applicable permit. In the past, facilities could submit an application to be covered under a group permit, but this option and the original group permit have expired. As of March 1998, 42 states and one territory have been delegated authority by EPA to administer the NPDES program. EPA has not delegated authority to the following states and territories: Alaska, Arizona, District of Columbia, Idaho, Maine, Massachusetts, New Hampshire, New Mexico, Pacific Territories, Puerto Rico, Texas, and the federal Tribal Lands. Of the delegated NPDES states and territories, only the Virgin Islands has not been delegated authority for the storm water general permits program as well.

As part of the storm water permits, facilities are required to develop and implement storm water pollution prevention plans (SWPPPs). These plans are intended to prevent storm water from coming in contact with potential contaminants. Each plan is facility specific because every facility is unique in its source, type and volume of contaminated storm water discharges. Regardless of the variations, all plans must include several common elements, such as a map and site specific considerations.

For more information, see:

- Section 4.3.2 *Storm Water Dischargers*
- 40 CFR 122.26: Storm Water Discharges
- Appendix A.1. *Summary of Principal Regulations Under the Clean Water Act.*

Pretreatment Program. Industrial wastewater that is treated by a POTW is another type of discharge that is regulated by the CWA. The national **pretreatment program** (CWA 307(b)) controls the indirect discharge of pollutants to POTWs by "industrial users." Facilities regulated under 307(b) must meet certain pretreatment standards. The goal of the pretreatment program is to protect the following: (1) municipal wastewater treatment plants from damage that may occur when hazardous, toxic, or other wastes are discharged into a sewer system from industrial activities; (2) the quality of sludge generated by these plants; and (3) the receiving water by preventing the introduction of pollutants into POTWs which will pass through the treatment works. Discharges to a POTW are regulated primarily by the POTW itself, rather than the state or EPA. New food processing facilities, or facilities that have not contacted their POTW in the past, can find the number of their local POTW in the phone book. The wastewater treatment superintendent or pretreatment coordinator can provide the facility with any necessary information.

Pretreatment requirements are discussed in more detail in Section 4.4.1 and Appendix A.1.

There are three types of pretreatment requirements: requirements for general industry (**general pretreatment standards**), requirements for specific industries (**categorical pretreatment standards**), and locally established requirements for specific facilities (**local limits**). EPA does not consider food processing facilities to be categorical users and has not established specific numerical limits for indirect discharges from food processors. Hence, **categorical pretreatment standards** that apply to food processing operations require compliance with 40 CFR 403 **(general pretreatment standards)**. **Local limits** may also apply to your facility.

For more information, see:

- Section 4.4 *Am I An Indirect Discharger?*
- 40 CFR 403: Pretreatment Program Requirements
- Appendix A.1. *Summary of Principal Regulations Under the Clean Water Act.*

Oil Pollution Prevention Requirements. In 1973, EPA issued the Oil Pollution Prevention Regulation (40 CFR 112), also known as the Spill Prevention, Control and Countermeasures (SPCC) regulation, to address the oil spill prevention provisions contained in the Clean Water Act (CWA) of 1972. The main objective of the SPCC program is to **prevent** oil spills from **regulated aboveground and underground storage tanks** from reaching navigable waters of the U.S. or adjoining shorelines. In 1990, Congress passed the Oil Pollution Act (OPA) that amended Section 311 of the CWA to require **substantial harm** facilities to develop and implement facility response plans (FRPs). FRPs help facility owners/operators develop a response organization and identify the resources needed to respond to an oil spill adequately and in a timely manner.

Oil Pollution Prevention requirements are discussed in more detail in Section 4.6 and Appendix A.1.

Under the CWA, the definition of oil includes oil of any kind and any form, such as petroleum and nonpetroleum oils. Generally, oils fall into the following categories: crude oil and refined petroleum products, edible animal and vegetable oil, other oils of animal or vegetable origin, and other nonpetroleum oils.

EPA's regulation requires facilities to prepare a plan and implement measures to prevent and control oil spills, regardless of the cause (e.g., human operational error, equipment failure or natural causes, such as lightning striking a tank). If your facility is subject to the SPCC requirements, EPA requires you to prepare an SPCC plan and conduct an initial screening to determine whether you are required to develop an FRP. Those facilities that could cause **substantial harm** to the environment must prepare and submit an FRP to EPA for review.

In the event of an oil spill or release, you must first report it to the **National Response Center at 1-800-424-8802 or 703-412-9810 (Washington, D.C. area)**. In addition, you (the owner or operator of a regulated facility) must submit, in writing, certain information including the SPCC Plan to the EPA Regional Administrator within 60 days, if the release meets either of the following conditions: (1) **either** a single discharge of more than 1,000 gallons of oil; **or** (2) two reportable spills/discharges of oil in harmful quantities, during any 12-month period, into or upon navigable waters, shorelines, etc.

For more information, see:

- Section 4.0 *How Do I Comply With Wastewater Discharge and Related Regulations?*
- 40 CFR 112 Oil Pollution Prevention Regulation
- Appendix A.1. *Summary of Principal Regulations Under the Clean Water Act.*

Examples of CWA Enforcement Provisions and Penalties

The 1987 amendments to the CWA increased EPA's penalty authorities as an enforcement tool. Congress added new authority for assessment of administrative penalties and increased penalties for civil and criminal violations. Some examples of EPA's enforcement authorities under the NPDES Program and the Oil Pollution Prevention Program are summarized below. Civil penalty amounts presented here also reflect the inflation adjustment authorized by Congress under the Debt Collection Improvement Act of 1996. See Section 2.11 for more information.

NPDES Program

- Federal civil penalties: Persons who discharge pollutants from a point source without a NPDES permit or in violation of that permit may be subject to the following: Administrative penalties up to $11,000 per day per violation; civil judicial penalties of up to $27,500 per day per violation.

- Federal criminal penalties: Penalties for negligent violation may include fines up to $25,000 per day of violation or one year imprisonment, or both. Penalties for knowing violations may include fines up to $50,000 per day of violation or imprisonment of up to three years, or both. Penalties for knowing endangerment may include fines up to $250,000 or imprisonment for not more than 15 years.

Oil Pollution Prevention Program

For discharges of oil or hazardous substances from onshore or offshore facilities, the owner, operator, or person in charge may be subject to the following:

- Federal civil penalties: Administrative penalties up to $11,000 per day per violation; civil judicial penalties of up to $27,500 per day of violation, or up to $1,100 per barrel of oil or unit of reportable quantity discharged. Violations which are the result of gross negligence or willful misconduct are subject to civil judicial penalties of not less that $110,000 and not more that $3,300 per barrel of oil or unit of reportable quantity discharged.

- Federal criminal penalties: Knowing violations may result in fines of up to $50,000 per day of violation, or up to three (3) years of imprisonment, or both; knowing endangerment may include fines up to $250,000 or imprisonment for not more than 15 years.

See Section 2.11.2 *Summary of Food Processing Cases in ECAARs from FY 1991 - 1997* for a description of CWA cases.

Note: EPA's Office of Water (202-260-5700) will direct callers with questions about the CWA to the appropriate EPA office. EPA also maintains a bibliographic database of Office of Water publications which can be accessed through the Ground Water and Drinking Water Resource Center at 202-260-7786.

2.3 Safe Drinking Water Act (SDWA)

Safe drinking water regulations are discussed in more detail in Section 5.0 and Appendix A.2.

The SDWA is the federal legislation that protects public health by regulating public drinking water and underground injection. EPA is responsible for writing regulations to carry out the provisions of the Act. Fifty-four of 56 states and territories have primacy to enforce compliance with National Primary Drinking Water Regulations (NPDWRs), as well as monitoring/reporting and public notification requirements contained in 40 CFR 141. EPA has primacy in Wyoming, Washington, D.C., and Tribal Lands, and may also take enforcement action in a primacy state where the state does not take an enforcement action in response to a violation. Generally speaking, most primacy states adopt drinking water regulations which closely reflect the federal requirements.

EPA has developed national primary and secondary drinking water regulations under its SDWA authority, as well as monitoring/reporting, and public notification requirements. As part of the NPDWRs, EPA has developed maximum contaminant levels (MCLs) and treatment techniques (TTs) for more than 80 contaminants. MCLs are based on maximum contaminant level goals (MCLGs) and other factors. When there is no reliable method that is economically and technically feasible to measure a contaminant at particularly low concentrations, a TT is set rather than an MCL. Examples of TT rules are the Surface Water Treatment Rule and the Lead and Copper Rule. See Section 5.4.1 *National Primary Drinking Water Regulations* for more information.

National secondary drinking water regulations (NSDWRs) are federal guidelines regarding taste, odor, color, and certain other non-aesthetic effects of drinking water. These regulations are not federally enforceable. EPA recommends them to states as reasonable goals, but federal law does not require water systems to comply with them. States may however, adopt their own enforceable regulations governing these concerns. Therefore, check your state's drinking water regulations and contact your state regulatory agency.

In addition to EPA's SDWA requirements, water used in food processing operations must meet the Food and Drug Administration (FDA) and the United States Department of Agriculture (USDA) requirements. The FDA, under its good manufacturing practice regulations, requires that "any water that contacts food or food-contact surfaces shall be safe and of adequate sanitary quality" (Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food, 21 CFR 110.37). In addition, the USDA's Food Safety and Inspection Service (FSIS) sets standards for activities associated with the production of meat and poultry products, including standards involving water use and reuse.

For more information, see:

- Section 5.0 *How Do I Comply With Safe Drinking Water Regulations?*
- 40 CFR 141: National Primary Drinking Water Regulations
- 40 CFR 142: National Drinking Water Regulations Implementation
- 29 CFR 110: Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food
- Appendix A.2. *Summary of Principal Regulations Under the Safe Drinking Water Act*.

Underground Injection Control (UIC) Requirements. The SDWA UIC program (40 CFR 144-148) is a permit program designed to protect underground sources of drinking water by regulating the injection of liquid waste into five classes of injection wells. The UIC permit program is primarily enforced by primacy states; however, EPA maintains primacy for all wells in 13 states and territories, all Tribal Lands, and for some classes of wells in 7 states.

UIC requirements are discussed in Section 5.5 and Appendix A.2.

If your facility meets certain criteria, you are required to obtain UIC authorization by permit or by rule to inject liquid waste. UIC permits include design, operating, inspection, closure, and monitoring requirements. Wells used to inject hazardous wastes also must comply with RCRA corrective action standards (40 CFR 264) in order to be granted a RCRA permit, and must meet applicable RCRA land disposal restriction (LDR) standards. See Section 8.6, Compliance Requirements for SQGs and LQGs, for more information on LDR standards.

For more information, see:

- Section 5.5 *Underground Injection Control (UIC) Requirements*
- 40 CFR 144-148: Underground Injection Control Program
- Appendix A.2: *Summary of Principal Regulations Under the Safe Drinking Water Act*.

Examples of SDWA Enforcement Provisions and Penalties

The 1986 amendments to the SDWA increased EPA's penalty authorities as an enforcement tool. Congress added new authority for assessment of administrative penalties and increased penalties for civil and criminal violations. These authorities were further strengthened for the Public Water Supply System (PWSS) program by the 1996 SDWA amendments. Some examples of EPA's enforcement authorities under the PWSS and UIC programs are summarized below.

PWSS Program

- Federal civil penalties: Persons who violate any applicable national primary drinking water regulation may be subject to the following penalties: up to $27,500 for failure to comply with any Administrative Compliance Order (any penalty sought in excess of $25,000, must be assessed by a civil judicial action); civil judicial penalties of up to $27,500 per day per violation.

- Federal criminal penalties: Persons who tamper with or attempt to tamper or threaten to tamper with a public water supply may be subject to the following: for tampering,

not more than 5 years imprisonment, or fined in accordance with Title 18 U.S.C., or both; for attempting or threatening to tamper, not more than 3 years imprisonment, or fined in accordance with Title 18 U.S. C., or both; or a civil penalty of not more than $55,000 for any tampering, or not more than $22,000 for any attempt or threat.

Underground Injection Control

Persons who violate the requirements of an applicable UIC requirement may be subject to:

- Federal civil penalties: Administrative penalties up to $11,000 per day and civil judicial penalties of up to $27,500 per day per violation.
- Federal criminal penalties: Criminal penalties for willful violations may include fines in accordance with Title 18 U.S.C. or three years imprisonment, or both.

EPA also has emergency powers that are applicable to both PWSS and UIC when a contaminant**,** that may present an imminent and substantial endangerment to the health of persons, is present in or likely to enter a public water system or an underground source of drinking water.

Note: EPA's Safe Drinking Water Hotline (1-800-426-4791) provides answers to questions and distributes guidance pertaining to SDWA standards.

2.4 Clean Air Act (CAA)

The Clean Air Act (CAA), including the Amendments (CAAA) of 1990, are designed to "protect and enhance the nation's air resources so as to promote the public health and welfare and the productive capacity of the population." Under the CAAA, many facilities will be required to obtain permits for the first time. State and local governments oversee, manage, and enforce many of the requirements of the CAAA.

CAA requirements are discussed in more detail in Section 6.0 and Appendix A.3.

CAA Titles. The CAA consists of six sections, referred to as Titles, which direct EPA to establish national standards for ambient air quality. Titles I-VI regulations can be found in 40 CFR 50-95.

- **Title I - Air Pollution Prevention and Control.** Pursuant to Title I of the CAA, EPA has established national ambient air quality standards (NAAQSs) to limit levels of six **criteria pollutants**, including carbon monoxide, lead, nitrogen oxides, particulate matter (PM), ozone, and sulfur dioxide (40 CFR 50). Under Section 110 of the CAA, each state must develop a State Implementation Plan (SIP) to identify sources of air pollution and to determine what reductions are required to meet federal air quality standards. The SIP must be approved by EPA, or EPA may promulgate a plan of its own. Once a SIP is approved, it may be enforced by both federal and state authorities (CAA Section 110, 42 U.S.C., Section 7410(a)(2)). Geographic areas that meet NAAQSs for a given pollutant are classified as attainment areas; those that do not

meet NAAQSs are classified as nonattainment areas. Those areas that are classified as nonattainment must update their SIPs in order to improve air quality.

Title I also authorizes EPA to establish New Source Performance Standards (NSPSs), which are nationally uniform emission standards for new stationary sources falling within particular industrial categories (CAA Section 111). NSPSs are based on the pollution control technology available to that category of industrial source but allow the affected industries the flexibility to devise a cost-effective means of reducing emissions.

- **Title II - Emission Standards for Moving Sources.** Title II of the CAA (Section 201-250) pertains to mobile sources, such as cars, trucks, buses, and planes. It establishes allowable levels of automobile emissions and includes provisions for alternative fuels. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms EPA uses to regulate mobile air emission sources.

- **Title III - Air Toxics.** Under Title I, EPA establishes and enforces National Emissions Standards for Hazardous Air Pollutants (NESHAPs), nationally uniform standards oriented towards controlling particular hazardous air pollutants (HAPs). Title III further directed EPA to develop a list of sources that emit any of 188 HAPs listed under Section 112 of the CAA, and to develop regulations for these categories of sources. To date, EPA has listed 174 categories and developed a schedule for the establishment of emission standards. The emission standards will be developed for both new and existing sources based on maximum achievable control technology (MACT). The MACT is defined as the control technology achieving the maximum degree of reduction in the emission of the HAPs, taking into account cost and other factors.

- **Title IV - Acid Deposition Control.** Acid rain occurs when sulfur dioxide and nitrogen oxide emissions are released into the atmosphere and return to the earth in rain, fog, or snow. Title IV establishes a sulfur dioxide emissions program designed to reduce the formation of acid rain by requiring power plants and other utilities to reduce sulfur dioxide emissions. Reduction of sulfur dioxide releases will be obtained by granting certain sources limited emissions allowances. This program began in 1995 and set levels of sulfur dioxide releases below previous levels.

- **Title V - Permits.** Title V of the CAAA of 1990 created a permit program for all **major sources** (and certain other sources) regulated under the CAA. One purpose of the operating permit is to include, in one document, all air emissions requirements that apply to a given facility. States are developing the permit programs in accordance with guidance and regulations from EPA. Once a state program is approved by EPA, permits will be issued and monitored by that state.

- **Title VI - Stratospheric Ozone.** Title VI is intended to protect stratospheric ozone by phasing out the manufacture of ozone-depleting chemicals and restricting their use and distribution. Title VI requires EPA to list all regulated substances along with their ozone depletion potential, atmospheric lifetimes, and global warming potentials. Production of Class I substances, including 15 kinds of chlorofluorocarbons (CFCs), will be phased out entirely by the year 2000, while certain hydrochlorofluorocarbons

(HCFCs) will be phased out by 2030. Title VI also requires EPA to publish a list of substitutes for Class I and II chemicals.

Risk Management Program. As required under Section 112(r) of the amended CAA, EPA has promulgated the Risk Management Program Rule. The rule's main goals are to **prevent accidental releases** of regulated substances and to reduce the severity of those releases that do occur by requiring facilities to develop risk management programs. The risk management programs must incorporate three elements: a hazard assessment, a prevention program, and an emergency response program. These programs are to be summarized in a risk management plan (RMP) that will be made available to state and local government agencies and the public. Besides helping facilities prevent accidents, the rule can improve the efficiency of work operations by ensuring that workers are trained in proper procedures and by using preventive maintenance to reduce equipment breakdowns.

Food processors may be subject to risk management planning requirements if they have one or more of the identified substances onsite above the threshold quantity. Ammonia is one of the identified substances.

If you have more than a threshold quantity of any of the **regulated substances** in a single process, you are required to comply with the regulation (40 CFR 68). EPA has currently established a list of 140 regulated substances that fall under these CAA regulations. These substances were published in the *Federal Register* on January 31, 1994; EPA amended the list by rule, published on December 18, 1997. EPA may amend the list in the future as needed. Covered facilities must comply with the rule **by June 21, 1999.** The RMPs will be available electronically to state and local governments and citizens to help them understand local chemical hazards and take steps to prevent accidents.

For more information on risk management planning, contacting the RCRA/UST, Superfund and EPCRA Hotline at 1-800-424-9346 or 703-412-9810, or access EPA's Chemical Emergency Preparedness and Prevention Office Home Page at **http://www.epa.gov/swercepp/.**

For more information, see:

- Section 6.0 *How Do I Comply With Air Regulations?*
- 40 CFR 50-99: Air Programs
- 40 CFR 68: Chemical Accident Prevention Provisions
- Appendix A.3. *Summary of Principal Regulations Under the Clean Air Act.*

Examples of CAA Enforcement Provisions and Penalties

The 1990 Clean Air Act Amendments gave EPA additional enforcement authorities including administrative authorities and field-issued citations. Field-issued citations are those that are issued by a compliance inspector at the time of an inspection. Civil penalty amounts presented here also reflect the inflation adjustment authorized by Congress under the Debt Collection Improvement Act of 1996 (see Section 2.11 for more information).

- Federal civil penalties: Failure to comply with an air operating permit, the State Implementation Plan (SIP) or a federal regulation may result in a civil judicial penalty of up to $27,500 per day per violation. A field-issued citation may result in penalties up to $5,000 per violation.

- Federal criminal penalties: Knowing violation may result in criminal penalties including fines up to $1,000,000 per day per violation and fifteen years imprisonment.

See Section 2.11.2 *Summary of Food Processing Cases in ECAARs from FY 1991 - 1997* for a description of CAA cases.

Note: EPA's Control Technology Center (919-541-0800) provides general assistance and information on CAA standards. The Stratospheric Ozone Information Hotline (1-800-296-1996) provides general information about regulations promulgated under Title VI of the CAA, and EPA's RCRA/UST, Superfund and EPCRA Hotline (1-800-424-9346 or 703-412-9810) provides information concerning accidental release prevention under CAA Section 112(r). In addition, the Technology Transfer Network Bulletin Board System (modem access 919-541-5742) includes recent CAA rules, EPA guidance documents, and updates of EPA activities.

2.5 Emergency Planning And Community Right-To-Know Act (EPCRA)

EPCRA requirements are discussed in more detail in Section 7.0 and Appendix A.4. CERCLA requirements are discussed in more detail in Section 10.0 and Appendix A.5.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 created EPCRA, also known as SARA Title III. This statute was designed to improve community access to information about chemical hazards and to facilitate the development of chemical emergency response plans by state and local governments. EPCRA required the establishment of state emergency response commissions (SERCs). SERCs are responsible for coordinating certain emergency response activities and for appointing local emergency planning committees (LEPCs).

EPCRA regulations establish four types of reporting obligations for facilities which store or manage specified chemicals:

- ***EPCRA Section 302/303.*** Requires facilities to notify the SERC (EPCRA Section 302) and LEPC (EPCRA Section 303) of the presence of any extremely hazardous substance (the list of such substances in 40 CFR 355, Appendices A and B) if it has such a substance in excess of the substance's threshold planning quantity.

- ***EPCRA Section 304.*** Requires the facility to notify the SERC and the LEPC in the event of an accidental release exceeding the reportable quantity of an EPCRA extremely hazardous substance or a CERCLA hazardous substance. Facilities are also required to notify the National Response Center at 1-800-424-8802 in the event of a release of a CERCLA hazardous substance.

- ***EPCRA Sections 311 and 312.*** Require a facility at which a hazardous chemical [as defined by the Occupational Safety and Health Administration (OSHA)] or an EPCRA extremely hazardous substance is present in an amount exceeding a specified threshold to submit to the SERC, LEPC, and local fire department material safety data sheets (MSDSs) or lists of MSDSs and hazardous chemical inventory forms (also known as Tier I and II forms). This information helps the local government respond in the event of a spill or release of the chemical.

- ***EPCRA Section 313.*** Commonly referred to as the Toxic Chemical Release Inventory (TRI), this program requires certain designated businesses to submit annual reports (known as Form Rs and Form As) on more than 600 EPCRA Section 313 chemicals and chemical categories. Facilities meeting the EPCRA Section 313 reporting criteria must report the annual releases and other waste management activities (routine and accidental) of EPCRA Section 313 chemicals to all environmental media. The reports are submitted to U.S. EPA and State or Tribal governments, on or before July1, for activities in the previous calendar year. This information increases the public's knowledge or, and access to information on the presence of toxic chemicals in their communities.

All information submitted pursuant to EPCRA regulations is publicly accessible, unless protected by a trade secret claim.

For more information, see:

- Section 7.0 *How Do I Comply With the Emergency Planning and Community Right-to-Know Act Requirements?*
- 40 CFR 350-372: Emergency Planning and Community Right-to-Know Information
- Appendix A.4. *Summary of Principal Regulations Under the Emergency Planning and Community Right-to-Know Act*.

Examples of EPCRA Enforcement Provisions and Penalties

Examples of civil and criminal penalties under EPCRA are described below. Civil penalty amounts presented here also reflect the inflation adjustment authorized by Congress under the Debt Collection Improvement Act of 1996. (See Section 2.11 for more information.)

- Federal civil penalties: Failure to do the following may result in civil penalties of up to $27,500 per day per violation: submit Forms Rs for all EPCRA 313 chemicals for which the facility exceeded the threshold; provide information in response to a request from the local emergency planning committee; report accidental releases to all appropriate authorities; provide all reporting information required; or notify the committee of any changes at the facility that affect the development of the emergency response plan.

- Federal criminal penalties: Knowing violation may result in criminal penalties including fines up to $25,000 and/or up to two years in prison.

See Section 2.11.2 *Summary of Food Processing Cases in ECAARs from FY 1991 - 1997* for a description of EPCRA cases.

Note: EPA's RCRA/UST, Superfund and EPCRA Hotline (1-800-424-9346 or 703-412-9810) provides information and distributes guidance regarding the emergency planning and community right-to-know regulations.

2.6 Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) of 1976 which amended the Solid Waste Disposal Act, addresses solid (Subtitle D) and hazardous (Subtitle C) waste management activities. The Hazardous and Solid Waste Amendments (HSWA) of 1984 strengthened RCRA's waste management provisions and added Subtitle I, which governs underground storage tanks (USTs).

Hazardous waste requirements are discussed in more detail in Section 8.0 and Appendix A.6.

Subtitle D of RCRA and its implementing regulations basically apply to the management of solid, nonhazardous waste and its disposal in landfills. Subtitle D applies to your food processing facility because it prohibits open dumping of solid, nonhazardous wastes. A nonhazardous waste is defined as any garbage, refuse, or sludge from waste treatment plants, water treatment plants, or air pollution control equipment. Programs addressing the disposal of solid, nonhazardous wastes are developed and enforced at the state or local level. Contact your state for more information on proper disposal practices.

Regulations promulgated pursuant to **Subtitle C** of RCRA (40 CFR 260-299) establish a "cradle-to-grave" system governing hazardous waste from the point of generation to disposal. RCRA hazardous wastes include the specific materials listed in the regulations or materials which exhibit a hazardous waste characteristic (ignitability, corrosivity, reactivity, or toxicity).

Regulated entities that generate hazardous waste are subject to waste accumulation, manifesting, and recordkeeping standards. Facilities that treat, store, or dispose of hazardous waste must obtain a permit, either from EPA or from a state agency which EPA has authorized to implement the permitting program. Subtitle C permits contain general facility standards such as contingency plans, emergency procedures, recordkeeping and reporting requirements, financial assurance mechanisms, and unit-specific standards. RCRA also contains provisions (40 CFR 264 Subpart S and 264.10) for conducting corrective actions which govern the cleanup of releases of hazardous waste or constituents from solid waste management units at RCRA-regulated facilities.

Most RCRA requirements are not industry specific but apply to any company that generates, transports, treats, stores, or disposes of hazardous waste. Although RCRA is a federal statute, many states implement the RCRA program. Currently, EPA has delegated its authority to 46 states to implement various provisions of RCRA. UST programs are delegated to about half of the states. Important RCRA regulatory requirements include:

- **Identification of Solid and Hazardous Wastes** (40 CFR 261) lays out the procedure every generator should follow to determine whether the material created is considered a solid waste, hazardous waste, or is exempt from regulation.

Food processors typically generate small amounts of hazardous waste. See Section 8.0 for more information.

- **Standards for Generators of Hazardous Waste** (40 CFR 262) establishes the responsibilities of hazardous waste generators including obtaining an identification (ID) number, preparing a manifest, ensuring proper packaging and labeling, meeting standards for waste accumulation units, and recordkeeping and reporting requirements. Generators can accumulate hazardous waste for up to 90 days (or 180 days depending on the amount of waste generated per month) without obtaining a permit for being a treatment, storage, and disposal (TSD) facility.

- **Land Disposal Restrictions (LDRs)** (40 CFR 268) are regulations prohibiting the disposal of hazardous waste on land without prior treatment. Under the LDRs, materials must meet LDR treatment standards for hazardous constituents prior to placement in a RCRA land disposal unit (landfill, land treatment unit, waste pile, or surface impoundment). Land disposal units are defined in 40 CFR 264 and 265, Subparts K-N. Generators of waste subject to the LDRs must provide notification of such to the designated TSD facility to ensure proper treatment prior to disposal.

- **Used Oil Management Standards** (40 CFR 279) impose management requirements affecting the storage, transportation, burning, processing, and re-refining of the used oil. For parties that merely generate used oil, regulations establish storage standards. For a party considered a used oil marketer (one who generates and sells off-specification used oil directly to a used oil burner), additional tracking and paperwork requirements must be satisfied, including registration form EPA 8700-12.

- **Containers** (40 CFR 264 and 265, Subpart I; 40 CFR 261.7) are one of the most commonly used and diverse forms of hazardous waste storage. There are two sets of regulations for containers: requirements that pertain to the management of hazardous waste containers (40 CFR 264/265, Subpart I) and the regulations governing residues of hazardous waste in empty containers (40 CFR 261.7).

- **Tanks** (40 CFR 265, Subpart J) are used widely for storage or accumulation of hazardous waste because they can accommodate huge volumes. Generators accumulating hazardous waste in tank systems are subject to the interim status provisions in 40 CFR 265, Subpart J.

- **Emissions - Tanks and Containers** (40 CFR 264 and 265, Subpart CC) used to store hazardous waste with a high volatile organic concentration must meet emission standards under RCRA. Regulations require generators to test the waste to determine the concentration of the waste, to satisfy tank and container emissions standards, and to inspect and monitor regulated units. These regulations apply to all facilities that store such waste, including generators operating under the 90-day accumulation rule.

- **Storage Tanks - USTs** (40 CFR 280) containing petroleum and hazardous substances are regulated under RCRA, Subtitle I. Subtitle I regulations contain tank design and release detection requirements, as well as financial responsibility and corrective action standards for USTs. The UST program also establishes standards for upgrading existing tanks, that must be met by December 22, 1998.

  Note: Aboveground storage tanks (ASTs) may be used to store materials, such as vegetable oils, used in food processing. ASTs are regulated under the CWA and OPA. Refer to Section 4.0 *How Do I Comply with Wastewater Discharge and Related Regulations?* for more information on ASTs.

For more information, see:

- Section 8.0 *How Do I Comply With the Hazardous Waste Regulations?*
- 40 CFR 260-299*:* Hazardous Waste Management
- Appendix A.6. *Summary of Principal Regulations Under the Resource Conservation and Recovery Act*.

Examples of RCRA Enforcement Provisions and Penalties

General enforcement penalty information is presented below for the solid waste, hazardous waste, and underground storage tank categories of RCRA regulations. Civil penalty amounts presented here also reflect the inflation adjustment authorized by Congress under the Debt Collection Improvement Act of 1996 (see Section 2.11 for more information).

Solid Waste

- Federal law does not establish specific penalties for civil or criminal violations of the solid waste program. Enforcement of the solid waste program relies on state law.

Hazardous Waste

Federal law for the hazardous waste management program has provisions for civil and criminal penalties.

- Federal civil penalties: Civil penalties may be up to $27,500 per day of noncompliance per incident and the company's permit may be revoked.

- Federal criminal penalties: The criminal penalties apply to individuals within a company and are a maximum of two years (five years for specified violations) imprisonment and a maximum penalty of $50,000 per day of noncompliance per incident.

Underground Storage Tanks

Failure to comply with UST requirements may result in the following types of civil penalties:

- Federal civil penalties: Administrative penalties may be up to $11,000 per violation per tank per day of noncompliance. Failure to comply with an enforcement order can result in civil judicial penalties of up to $27,500 per day of noncompliance with the order.

See Section 2.11.2 *Summary of Food Processing Cases in ECAARs from FY 1991 - 1997* for a description of RCRA cases.

Note: EPA's RCRA/UST, Superfund and EPCRA Hotline (1-800-424-9346 or 703-412-9810) provides information and distributes guidance regarding all RCRA regulations.

2.7 Comprehensive Environmental Response, Compensation, And Liability Act (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), a 1980 law commonly known as Superfund, authorizes EPA to respond to releases, or threatened releases, of hazardous substances that may endanger public health, welfare, or the environment. SARA revised various sections of CERCLA, extended the taxing authority for Superfund and creating a free-standing law, SARA Title III, also known as EPCRA (discussed in Section 2.5).

***Release Reporting*.** When there is a release of a CERCLA hazardous substance in an amount equal to or in excess of a certain quantity for that substance, CERCLA requires the person in charge of a vessel or facility to immediately notify the **National Response Center at 1-800-424-8802** (40 CFR 302, CERCLA 103(a)). See Section 7.0 for more information on EPCRA and CERCLA emergency release reporting requirements.

CERCLA release reporting requirements are discussed in more detail in Section 7.0, 10.0, and Appendix A.5.

Responses. EPA implements hazardous substance responses, known as remedial actions or removals, according to procedures outlined in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300). While EPA generally takes remedial actions only at National Priorities List (NPL) sites, both EPA and states can act at other sites. The difference is that EPA can provide responsible parties the opportunity to conduct removal and remedial actions and encourages community involvement throughout the Superfund response process.

For more information, see:

- Section 7.0 *How Do I Comply With the Emergency Planning and Community Right-to-Know Act Regulations?*

- Section 10.0 *Other Major Environmental Statutes and Regulations: CERCLA, RCRA Subtitle D, FIFRA and TSCA*
- 40 CFR 300: National Oil and Hazardous Substances Pollution Contingency Plan
- 40 CFR 302: Hazardous Substance Release Reporting Regulations
- Appendix A.5. *Summary of Principal Regulations Under the Comprehensive Environmental Response, Compensation, and Liability Act*

Examples of CERCLA Enforcement Provisions and Penalties

Civil penalty amounts presented here also reflect the inflation adjustment authorized by Congress under the Debt Collection Improvement Act of 1996 (see Section 2.11 for more information).

- Federal civil penalties: Civil penalties of up to $27,500 per day per violation for the first violation and a second violation can be as high as $82,000 per day.

- Federal criminal penalties: Persons in charge of a facility from which a hazardous substance is released and who violate CERCLA's notification requirements (i.e., fail to notify the required government agency or knowingly submit false information) are subject to penalties under Title 18 or imprisonment for up to three years, or both. Persons who knowingly fail to notify EPA of hazardous substance management activities are subject to penalties up to $10,000 or imprisonment for up to one year.

Note: EPA's RCRA/UST, Superfund and EPCRA Hotline (1-800-424-9346 or 703-412-9810) provides information and references guidance pertaining to the Superfund program.

2.8 Toxic Substances Control Act (TSCA)

TSCA requirements are discussed in more detail in Section 10.4.

Under TSCA, EPA collects data on chemicals in order to evaluate, assess, mitigate, and control risks which may be posed by their manufacture, processing, and use. TSCA provides a variety of control methods to prevent chemicals from posing unreasonable risk, and the standards may apply at any point during a chemical's life cycle. Drugs, cosmetics, foods, food additives, pesticides, and nuclear materials are **exempt from TSCA** and are subject to control under other federal statutes (e.g., foods and food additives are under the purview of the Federal Food, Drug and Cosmetics Act (FFDCA) administered by the FDA. In order for a food or food additive to be exempt, however, it must meet the definition contained in the FFDCA (21 USC 321 et seq.), or related statutes such as the Poultry Products Inspection Act and the Federal Meat Inspection Act. If the food or food additive does not meet the definition, the substance may then be regulated under TSCA and is subject to all the requirements of TSCA including testing, premanufacture notice, reporting and recordkeeping, export notification, and import certification. For example, vegetable oils and their derivatives from vegetable processing that are used as an ingredient in lubricants, paints, inks, fuels, plastics, solvents and a variety of other industrial products are subject to all of TSCA's requirements.

Section 8 of TSCA authorizes EPA to require chemical manufacturers, importers, and processors to keep records and report certain information. This includes reporting as part of the inventory update (Section 8(a)); maintaining and reporting allegations of signification adverse reactions (Section 8(c)); reporting health and safety studies (Section 8(d)); and reporting information on a substances presenting a substantial risk of injury to health or the environment (Section 8(e). Additional reporting requirements for exports and imports are found in TSCA Sections 12 and 13, respectively.

The TSCA Chemical Substances Inventory is a compilation of the names of all existing chemical substances and currently contains over 70,000 existing chemicals. Information in the inventory is updated every four years (Inventory Update). If manufacturing or importing a chemical substance that is not already on the inventory (and has not been excluded by TSCA), a facility must submit a premanufacture notice (PMN) prior to manufacture or importation (TSCA Section 5).

Food processors manufacturing substances, such as vegetable oil and animal fats, that are used for non-food purposes (e.g., in inks) must comply with the Inventory Update rule.

For more information, see:

- Section 10.0 *Other Major Environmental Statutes and Regulations: CERCLA, RCRA Subtitle D, FIFRA and TSCA*
- 40 CFR 704: Reporting and Recordkeeping Requirements
- 40 CFR 707: Chemical Imports and Exports
- 40 CFR 710: TSCA Chemical Inventory
- 40 CFR 712: Chemical Information Rules
- 40 CFR 716: Health and Safety Data Reporting
- 40 CFR 717: Records and Reports of Allegations that Chemical Substances Cause Significant Adverse Reactions to Health or the Environment
- 40 CFR 720: Premanufacture Notice
- 40 CFR 723: Premanufacture Notification Exemptions
- 40 CFR 721: Significant New Uses of Chemical Substances
- 40 CFR 750: Procedures for Rulemaking Under Section 6 of TSCA
- 40 CFR 790: Test Rule Development and Exemption Procedures
- 40 CFR 791: Data Reimbursement
- 40 CFR 792: Good Laboratory Practice Standards.

Examples of TSCA Enforcement Provisions and Penalties

TSCA Section 11 gives EPA broad authority to inspect establishments which hold chemicals and to subpoena information for enforcement of the Act. TSCA Sections 15, 16, and 17, respectively, list prohibited acts, their attendant civil and criminal penalties, and the jurisdiction of the federal district court for specific enforcement and seizure. Civil penalty amounts presented here also reflect the inflation adjustment authorized by Congress under the Debt Collection Improvement Act of 1996 (see Section 2.11 for more information).

- Federal civil penalties: Civil penalties of up to $27,500 per day per violation.
- Federal criminal penalties: Criminal penalties may be up to $25,000 per day per violation and/or imprisonment for up to one year.

Note: EPA's TSCA Assistance Information Service (202-554-1404) provides information and distributes guidance pertaining to TSCA standards.

2.9 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) primarily regulates the manufacture and registration of pesticides (40 CFR 152 and 156), but important requirements also exist for pesticides **users**.

Pesticide handling requirements are discussed in more detail in Section 10.3.

FIFRA requires that all pesticides be registered for every intended use, and that labels containing instructions for proper storage, use, and disposal accompany each pesticide marketed. It is considered illegal to use a pesticide in a manner inconsistent with its label. The "label is the law." Under FIFRA, pesticides must be classified for either general use or restricted use. EPA classifies some pesticides as restricted use because they have high toxicity or pose particular environmental hazards. Restricted use pesticides may be applied only by certified pesticide applicators. Pesticide labels will state clearly whether a particular pesticide is restricted use only. For pesticides that are not restricted use, food processing facilities may purchase, store, apply, and dispose of the pesticides. Food processors must comply with all FIFRA requirements relating to these activities.

Food Quality Protection Act

FQPA requirements are discussed in more detail in Section 10.3.

The Food Quality Protection Act (FQPA), passed in 1996, was a comprehensive overhaul of the laws that regulate pesticides in food: FIFRA and the Federal Food, Drug and Cosmetics Act (FFDCA). The new law amends both major pesticide laws to establish a more consistent, protective regulatory scheme. The new **FFDCA provisions** include establishing a health-based safety standard for pesticide residues in food; adding special provisions for infants and children; placing limitations on benefits considerations; reviewing all existing tolerances within ten years; incorporating endocrine testing; enhancing enforcement of pesticide residue standards by allowing the FDA to impose civil penalties for tolerance violations; increasing right to know activities; and requiring uniformity of tolerances among states (unless the state petitions EPA for an exception, based on state-specific situations). The new **FIFRA provisions** include a pesticide reregistration program, pesticide registration renewal, registration of safer pesticides, minor use pesticide program, and an antimicrobial pesticide program.

For more information, see:

- Section 10.0 *Other Major Environmental Statutes and Regulations: CERCLA, RCRA Subtitle D, FIFRA and TSCA*
- 40 CFR 150: FIFRA
- 40 CFR 165: Regulations for the Acceptance of Certain Pesticides and Recommended Procedures for the Disposal and Storage of Pesticides and Pesticides Containers.

Examples of FIFRA Enforcement Provisions and Penalties

FIFRA. Civil penalty amounts presented here also reflect the inflation adjustment authorized by Congress under the Debt Collection Improvement Act of 1996 (see Section 2.11 for more information).

- Federal civil penalties: Commercial applicators may be fined up to $5,500 for each offense under FIFRA; private applicators may be fined $550 for the first offense and up to $1,000 for each subsequent offense.

- Federal criminal penalties: Commercial applicators may be fined up to $25,000 or up to one year in prison, or both, for knowing violations. Private applicators may be fined up to $1,000 or thirty days in prison, or both, for knowing violations.

Note: EPA's National Pesticides Telecommunications Network (NPTN) at 1-800-858-7378 provides pesticide information.

2.10 Other Federal Regulations

This subsection highlights two other environmental laws that may affect food processors, particularly in construction projects for new facilities or modifications of existing facilities. These include the Coastal Zone Management Act (CZMA) and the Endangered Species Act (ESA). You should be aware of and comply with the requirements of these regulations as described below. For purposes of this guide, additional information about these statutes is incorporated in Section 4.7.2. *Construction and Plant Modification Activities*.

2.10.1 Coastal Zone Management Act (CZMA)

The CZMA, enacted in 1972 and administered by the National Oceanic and Atmospheric Administration (NOAA), encourages states to preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetland, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats.

A unique feature of the CZMA is that participation by states is voluntary. The CZMA enables states to develop programs and plans that meet their specific needs, within the context of their

governmental structures. In addition, CZMA gives states the authority to review federal projects and projects receiving federal licenses and permits to ensure they abide by state laws, regulations, and policies. To encourage states to participate, the act makes federal financial assistance available to any coastal state or territory, including those on the Great Lakes, that is willing to develop and implement a comprehensive coastal management program (CMP). In addition to resource protection, the CZMA specifies that coastal states may manage coastal development. A state with an approved program can deny or restrict any development that is inconsistent with its CMP.

Under the 1990 CZMA Reauthorization Amendments, states must issue management measures for certain categories of runoff and erosion; evaluate nonpoint sources; and identify coastal areas that would be affected negatively by specified land uses. The 1990 Amendments mandate each coastal state to implement a Coastal Zone Nonpoint Pollution Control Program as part of each state's CMP. For example, under the program, pesticide application is subject to regulation if pesticide runoff from nonpoint sources reaches coastal waters. Consequently, food processors who use pesticides and live in coastal states should determine whether their land is part of the coastal zone, or if their pesticide application violates their state's applicable CMP.

States may add additional requirements to NPDES storm water permits in order to meet coastal zone nonpoint pollution control program goals. See Section 4.3 for more information.

The CZMA also was amended by the Coastal Zone Protection Act of 1996. This act amends the CZMA to change allowable uses and match requirements for certain grant funds and to change the process for consistency appeals.

For more information, see:

- Section 4.3 *Am I A Direct Discharger?*
- 16 U.S.C. Sections 1451-1464
- 15 CFR 921-932.

2.10.2 Endangered Species Act (ESA)

The Endangered Species Act (ESA), administered by the U.S. Department of Interior's Fish and Wildlife Service (USFWS) and the Department of Commerce's National Marine Fisheries Service (NMFS), establishes a program for the conservation of endangered and threatened species and the habitats in which they are found. The ESA affords broad protection for species of fish, wildlife, and plants that are listed as endangered and threatened in the U.S. and elsewhere. Provisions are made for listing species, as well as for recovery plans and the designation of critical habitat for listed species. Anyone can petition the USFWS to list a species. The ESA strives to conserve ecosystems both through federal action and by encouraging the establishment of state programs. State laws or regulations may be more, but not less, restrictive than the federal ESA or its regulations.

ESA requirements that may affect food processors are discussed in more detail in Section 4.7.2.

The term "take" includes harassing, harming, hunting, killing, capturing, and collecting.

The ESA prohibits the taking, possession, import, export, sale, and transport of any listed fish or wildlife species. It also is unlawful to maliciously damage, destroy, or remove from any area under federal jurisdiction, damage or remove from any other area in knowing violation of state law, import, export, or trade any listed plant species. These prohibitions do not apply to species legally held in captivity or a controlled environment. The USFWS or NMFS, by permit, also may allow a taking incidental to an otherwise lawful activity if the applicant submits, and the USFWS or NMFS approves, a conservation plan addressing the impact of the taking, mitigation measures, funding, and alternative actions considered.

Persons engaged in, or planning to engage in, activities such as construction or plant modification, must be aware if any endangered or threatened species exist on the property involved or if the property is considered part of a listed species' critical habitat. If neither is the case, the ESA does not apply. However, if the action will "take" a species or degrade critical habitat, some form of mitigating action must be taken to prevent harming the species.

For more information, see:

- Section 4.7.2 *Construction and Plant Modification Activities*
- 16 U.S.C. Sections 1531-1544
- 50 CFR 10, 13, 14, 17, and 23.

2.11 Summary Of The Enforcement Process and Selected Cases

2.11.1 Overview of Enforcement

Environmental enforcement is a comprehensive program involving federal, state, and local governments.

Some of the statute-specific enforcement authorities that Congress gave EPA are described earlier in this section. To provide a context for those examples, the following briefly describes the roles of EPA and the states in environmental enforcement, particularly under delegated or approved state programs, and the general types of enforcement responses available to EPA. Citizen suit authority also is discussed briefly.

Federal Government - Roles of EPA and DOJ

EPA leads the federal government's environmental enforcement efforts using the latest law enforcement techniques and drawing upon the specialized abilities of other federal agencies. EPA headquarters, located in Washington, D.C., includes the Office of Enforcement and Compliance Assurance (OECA) which manages the Agency's enforcement and litigation program. Ten EPA regional offices, located in cities such as Seattle, Atlanta, San Francisco, and Philadelphia, conduct most of the day-to-day enforcement activities of the Agency. Where a

state has been approved by EPA to implement a program, the EPA regional office oversees the state's performance to assure consistency with the federal law (see below). In unapproved states, the EPA regional office administers the program.

OECA includes the National Enforcement Investigations Center (NEIC) in Denver, and a Criminal Investigation Division (CID), headquartered in Washington, D.C., with field offices in the ten EPA regions as well as other locations around the country. NEIC provides technical support for EPA's civil and criminal cases. CID is the only federal law enforcement agency created for the purpose of investigating environmental crimes, although environmental crimes sometimes are investigated by the FBI and other federal agencies.

The U.S. Department of Justice (DOJ) plays a crucial role in EPA's enforcement activities. When EPA wishes to prosecute a violator in the U.S. court system, EPA refers the case to DOJ. DOJ attorneys, who specialize in environmental litigation, consider EPA's recommendations and make the final decision of whether or not to file the case in federal court. When the case goes to court, DOJ represents EPA in court, though EPA's legal and technical staff remain actively involved in the case. Like EPA, DOJ has a field organization -- the U.S. Attorneys; however, its civil environmental cases are handled by mostly DOJ headquarters attorneys.

State Government - Definition of Delegated or Approved Programs

Virtually every federal environmental law allows state governments to develop programs for implementing the federal law in their states. When a state submits a complete application and EPA has determined that the state program meets the federal requirements, EPA approves the state program. Depending on which federal statute, such programs are called "delegated," "authorized," "approved" or "primacy" programs. After EPA approves a program, the state applies the national standards and regulations by issuing and enforcing its own rules and permits. Many of EPA's statutes allow Native American Tribal Governments to develop programs for implementing the federal laws on Tribal lands, by means similar to EPA's process for delegating programs to states. As a matter of policy, EPA has extended this option to the other statutes that do not explicitly provide for delegation to Native American Tribal Governments. Hence, the potential exists to delegate to Native American Tribal Governments any program that EPA may delegate to states. In practice however, the number of Tribal Governments with delegated responsibilities is small. If you do operate a food processing facility on Tribal lands, you should check with the EPA's Regional Office and/or the Tribal Government to learn whether EPA has approved any Tribal Government environmental programs.

Under this system of delegated or approved programs, state governments carry out the vast majority of environmental enforcement actions. State governments conduct about 80-90 percent of the inspections and approximately 70 percent of the national total of the enforcement actions taken by the delegated clean air, clean water, and hazardous waste programs.

Enforcement at the state level is carried out by a number of different agencies, including the state environmental agencies, state Attorney General, and district attorneys. State environmental agencies usually have responsibility for permits, inspections, and certain types of enforcement actions. In many instances, pesticide laws are enforced by state Departments of Agriculture. In some states, a single environmental agency handles all EPA programs, while in

others, several agencies divide the responsibilities. States also may delegate some of the activities to county or city governments, such as the local health department.

The state Attorney General is the chief law enforcement official for the state. The Attorney General has responsibility for suing violators, at the request of state environmental agencies. District attorneys also may have responsibility for suing violators, and typically they represent municipalities. In some states, the District Attorney's approval is required for enforcement suits to be filed by the state Attorney General.

State/Federal Enforcement Partnerships

EPA strives to work out an effective enforcement partnership with each state. This is accomplished by establishing state/EPA enforcement partnership agreements that cover delegated programs and involve the appropriate state agencies. These agreements usually define the characteristics of a good enforcement program using the same criteria by which EPA judges its own performance.

The agreements also spell out the conditions under which EPA will step in and take enforcement action in a delegated or an approved state program. Common circumstances for such a step include the following:

- If the state requests federal action;
- If the state's enforcement response is not timely and appropriate (a set of criteria has been developed by EPA and the states for each major program);
- If the case involves national precedents; or
- If there is a violation of an EPA order or consent decree (settlement agreement).

Types of Enforcement Responses

Enforcement actions are tools designed to discourage companies and individuals in the regulated community from breaking the law, and to compel them to **return to compliance** when they do break the law. EPA has a range of options when contemplating an enforcement response against a violator. These options differ from one law to another, and include the following:

- ***Informal response.*** Administrative actions that are advisory in nature, such as a phone call, notice of noncompliance or a warning letter. In these actions, EPA advises the manager of a facility what violation was found, what corrective action should be taken, and by what date. Informal responses carry no penalty or power to compel actions, but if they are ignored, they can lead to more severe actions.

- ***Formal administrative responses.*** Legal orders that are independently enforceable and which may require the recipient to take some corrective or remedial action within a specified period of time, refrain from certain behavior, or be in future compliance. (Such an order may or may not have a penalty attached.) These administrative actions are strong enforcement tools. If a person violates an order, EPA may go to U.S. federal court to force compliance. Administrative actions are handled under EPA's internal administrative litigation system, which is comparable to any court system except that administrative law judges (ALJs) preside.

- ***Civil judicial responses.*** Formal lawsuits brought in U.S. federal court by DOJ at EPA's request. They normally are used against the more serious or recalcitrant violators of environmental laws or to seek prompt correction of imminent hazards. Civil judicial cases generally result in penalties and court orders requiring correction of the violation and specific actions to prevent future violations.

- ***Criminal judicial responses.*** Response used when a person or company has knowingly violated the law. In a criminal case, DOJ prosecutes an alleged violator in federal court, seeking criminal sanctions including fines and imprisonment. Criminal actions are often used to respond to flagrant, intentional disregard for environmental laws (such as operating secret by-pass pipes to discharge untreated wastewater and deliberate falsification of reports or records).

In many enforcement actions, EPA seeks both a remedy and a penalty. The remedy includes returning the violating facility to compliance and sometimes other remedial actions, as described below.

- ***Compliance.*** The violator will be required to comply with the law. If the violation has not already been corrected, the violator usually is placed under a court-ordered schedule, with severe penalties for failure to comply with the order.

- ***Benefit projects.*** In some cases, the violator is permitted to carry out a supplemental environmental project (SEP) that will yield environmental benefits. These projects may partly offset the penalty and may mitigate the harmful effects of the violation.

- ***Penalties.*** The violator is required to pay a cash penalty (in criminal cases, a fine) that is not tax deductible. The penalty includes sanctions intended to deter the violator from falling into noncompliance again and to deter others from similar violations. [1]

- ***Imprisonment.*** In criminal cases, the violator may be sentenced to jail or placed on probation.

- ***Contractor listing.*** A facility that has violated the CWA or CAA may be placed on EPA's List of Violating Facilities. Listed facilities are not eligible to receive federal contracts, grants, or loans from EPA or any other federal agency. Facilities that commit criminal violations of other environmental statutes are subject to possible

[1] **Civil Monetary Penalty Inflation Adjustment Rule.** This new rule (January 30, 1997) and the associated policy modified all of EPA's existing civil penalty policies by increasing the **gravity** component for civil monetary penalties by ten percent. EPA's action was based on the Debt Collection Improvement Act (DCIA) of 1996 that Congress enacted to restore the deterrent effect of federal civil penalties, eroded by inflation over the years. The law requires each federal agency to adjust its civil monetary penalties in accordance with a specified formula. EPA is required to review and adjust these amounts every four years. EPA's *Civil Monetary Penalty Inflation Adjustment Rule,* codified in 40 CFR 19, *Adjustment of Civil Penalties for Inflation,* increased **all 65** of the Agency's civil penalty provisions (with the exception of the 1996 Safe Drinking Water Act penalty provisions) by ten percent -- the maximum that Congress allowed for the first adjustment due to inflation. EPA's Office of Enforcement and Compliance Assurance (OECA) also issued a new penalty policy, *Modification to EPA Penalty Policies to Implement the Civil Monetary Penalty Inflation Rule* (May 9, 1997) See 40 CFR 19.4, Table 1, for a complete list of all EPA's civil monetary penalty authorities and amounts, or see the 1997 policy and related materials on OECA's home page at **http//www.epa.gov/oeca/.**

suspension and/or debarment from receiving or entering into EPA or other federal agency contracts.

Citizen Suit Provisions

The first citizen suit provision appeared in 1970, when Congress enacted the CAA. Specifically, this provision allowed citizens to sue polluters who violated certain requirements of the CAA and to sue EPA if it failed to carry out a non-discretionary duty set forth in the Act. Since that time, Congress has incorporated citizen suit provisions into many, but not all, federal environmental statutes. Although these provisions vary from statute to statute, such provisions generally allow citizen groups or individuals to file actions in federal district court against a facility to correct violations or collect fines and penalties.

2.11.2 Summary of Food Processing Cases in ECAARs from FY 1991-1997

For the past several years, EPA has published annual reports, the *Enforcement and Compliance Assurance Accomplishments Reports (ECAARs)*, on the accomplishments of the environmental enforcement and compliance assurance program. Although the organization of these reports has changed over the years, each report contains narrative descriptions of significant administrative, civil judicial and criminal cases that were either taken, developed, and/or settled by EPA and the states.

Most of the cases in each report reflect those that have been concluded by some type of settlement agreement, either administrative or civil judicial, or by court order. In a few instances the same case may appear in both an earlier and a later report, as it moves from the stage of being filed to being concluded. The conclusion might be a consent agreement that was negotiated over more than one year or a court order following a trial. In a criminal case, the sentencing of a convicted defendant(s) may be reported in the next year's report. Because the same case may appear in more than one report, a small amount of double counting results.

This summary is based on **78 cases** selected from all cases described in the ECAARs for fiscal years (FYs)1991-1997. These cases were chosen on the basis of the facility name, description of the type of business operation, or, in some instances, on the listed SIC Code. It's important to note that the cases described in each report **do not necessarily reflect all** of the cases affecting food processors in that particular fiscal year.

CWA Cases. More than one third of all the 78 ECAAR-reported cases over the seven year period involved violations under the CWA. Examples of violations include the following: exceeding NPDES discharge limits (BOD, TSS, temperature, pH, phosphorus, oil and grease); exceeding indirect discharge limits (BOD, ammonia); interference and pass through at a POTW; and illegal discharges to surface waters (beer, ammonia, blood wastes; groundwater contaminated with solvents). These cases resulted in civil penalties ranging from a low of $14,000 to a high of $12.6 million.

Several cases involved criminal acts, including the following: conspiracy to violate the CWA; falsifying discharge monitoring reports (DMRs) sent to EPA or the state; negligently or knowingly

discharging pollutants without a permit; operating a secret by-pass that resulted in discharge of untreated wastewater; and other acts. These cases resulted in criminal fines for the companies and/or the individuals involved. In addition, convicted individuals were sentenced either to incarceration in federal prison followed by a term of supervised release, or to a combination of in-home incarceration and community service.

CAA Cases. About one sixth of the 78 ECAAR-reported cases in the seven year period involved violations of the CAA. Examples of violations include: exceeding limits on boiler emissions (particulates); opacity; exceeding limits on volatile organic compound (VOC) emissions (ethanol); asbestos demolition and removal; prevention of significant deterioration (PSD) violations such as constructing of a major source without a permit; and violations of NSPS requirements. These cases resulted in civil penalties ranging from a low of $30,000 (opacity violations) to a high of $385,000 (VOC violations).

One criminal case involved illegal removal and release of asbestos to the air and resulted in a $350,000 fine for a food processor.

EPCRA Cases. Slightly less than one third of the 78 ECAAR-reported cases involved violations of EPCRA. On average, two cases were reported each fiscal year, until the FY 1997 EPCRA Section 312 Food Processing Sector Initiative which resulted in ten cases. Examples of violations include: failure to submit TRI Form Rs (ammonia, sulfuric acid, hydrochloric acid, and/or carbon dioxide); failure to submit material safety data sheets (MSDSs) to LEPCs; failure to submit Tier I/Tier II forms; and failure to report emergency releases of anhydrous ammonia to state and local authorities. Failure to report these same release to EPA was a violation of CERCLA. Therefore, several companies had violations under both EPCRA and CERCLA.

Penalties in the EPCRA cases ranged from a low of $2,000 (under the FY 1997 EPCRA Section 312 Food Processing Sector Initiative) to a high of about $73,000. The penalties in the combined EPCRA/CERCLA cases ranged from a low of $41,000 to a high of $180,830.

RCRA Cases. Only four of the 78 ECAAR-reported cases in the seven year period involved RCRA. Examples of violations include: violation of the used oil requirements; failure to make a hazardous waste determination; and accumulating hazardous waste onsite in excess of 90 days. Penalties in these cases ranged from $250,000 to $700,000.